# POLISH JOURNAL OF ENTOMOLOGY

POLSKIE PISMO ENTOMOLOGICZNE

VOL. **76**: 115-118 Bydgoszcz 30 June2007

# Phytodietus alpinator AUBERT, 1969 (Hymenoptera, Ichneumonidae) a new species to the fauna of Poland Supplementation of the checklist of Polish Phytodietus GRAVENHORST, 1829

### AGATA KOSTRO-AMBROZIAK

Department of Invertebrate Zoology, Institute of Biology, University of Białystok, ul. Świerkowa 20B, 15-950 Białystok, Poland; e-mail: ambro@uwb.edu.pl

**ABSTRACT.** *Phytodietus alpinator* AUBERT, 1969 (Hymenoptera, Ichneumonidae) is reported for the first time from Poland. The species has been found in the Podlasie, in the Biebrza National Park. A checklist of species of the genus *Phytodietus* GRAVENHORST, 1829 from Poland has been supplemented.

KEY WORDS: Ichneumonidae, Tryphoninae, Phytodietus, Poland.

### INTRODUCTION

The genus *Phytodietus* GRAVENHORST, 1829 belongs to the subfamily Tryphoninae. Data on the occurrence of species of this genus in Poland are fragmentary and scattered in numerous faunistics papers. Checklists of *Phytodietus* species according to both KAŹMIERCZAK (2004) and ZWAKHALS (2005) are incomplete and include a total of nine species. Further four species were indicated in the literature i.e. *Ph. griseanae* KERRICH, 1962 (SAWONIEWICZ 1996); *Ph. montanus* TOLKANITZ, 1979 (PIEKARSKA et. al. 2002, KOSTRO-AMBROZIAK 2006); *Ph. obscurus* DESVIGNES, 1856 (GADEK 1984) and *Ph. antennator* KASPARYAN, 1993 reported recently by KOSTRO-AMBROZIAK & SAWONIEWICZ (2007).

Herein a new species of *Phytodietus* and a new checklist of species of the genus in Polish fauna are presented.

# Phytodietus alpinator AUBERT, 1969

# Distribution

The species was described by AUBERT from Switzerland (AUBERT 1969). Since then it has been recorded only in Russia (KASPARYAN & TOLKANITZ 1999).

# **Material examined**

Female was collected by J. SAWONIEWICZ in the Podlasie, in the Biebrza National Park (Gugny) (FE01) (NE Poland), by Moericke's trap in herbal layer of fresh coniferous forest, 6 VII 2005 (Fig. 1). The specimen is deposited in the author's collection.

The specimen was compared with the type: Switzerland: Haute-Engadine, 17 V 1965, ex  $\it Exapate duratella$ , female.

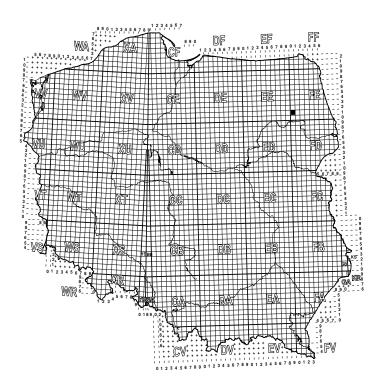


Fig. 1. The locality of *Phytodietus alpinator* AUBERT, 1969 in Poland.

#### Remarks

The specimen collected in Poland differs from the type by having flagellum with largest number of flagellomeres: 36 (the type: 32) and by having propodeum with largest quantity of transverse wrinkles.

In the literature *Exapate duratella* HEYDEN and *Zeiraphera griseana* (HÜBNER) (Tortricidae) are given as hosts of *Ph. alpinator* (KASPARYAN & TOLKANITZ 1999). In Poland only *Z. griseanae* was recorded (BUSZKO & NOWACKI 2000).

### Description

Female. Face mat, distinct punctate; flagellum with 36 flagellomeres; clypeus relatively convex, the apical margin with notch in the centre; malar space 0.8 times the basal wide of mandible; temples narrow receding behind the eyes; prepectal carina of mesopleuron present and distinct; pronotum without epomia; notaulus distinct, but not reaching to the front margin of mesoscutum; propodeum without any carinae, with transverse wrinkles; third segment of hind tarsal about 1.5 times as long as its fifth segment; hind femur about 6 times as long as wide.

Body black with a few yellow markings. Yellow: pair of small spost on vertex; mandible in the middle (the basal part black, teeth brown); tegula; mark on the apex of scutellum and postscutellum; pair of spots at the base of scutellum. Tergites black, sternites blackish-brown with bright apical margins. Fore and middle legs in general orangish-yellow, except their coxae black and trochanters I of fore legs with the base black and trochanters I of middle legs black with the apex orange (the type species: all trochanters completely black). Hind legs: coxae reddish; trochanters blackish-grey; femur orangish-yellow, at the apex with black ring; tibiae and tarsis blackish.

# A checklist of known from Poland species of Phytodietus GRAVENHORST, 1829

The species names are used according to KASPARYAN & TOLKANITZ (1999).

Ph. albipes Holmgren, 1856 (= variegatus Fonscolombe, 1854)

Ph. alpinator AUBERT, 1969

Ph. antennator KASPARYAN, 1993

Ph. arcuatorius (THUNBERG, 1824)

Ph. basalis KASPARYAN, 1993

Ph. femoralis HOLMGREN, 1860

Ph. gelitorius (THUNBERG, 1824)

Ph. geniculatus THOMSON, 1877

Ph. griseanae KERRICH, 1962

Ph. montanus TOLKANITZ, 1979

Ph. obscurus DESVIGNES, 1856 (= astutus GRAVENHORST, 1829)

Ph. ornatus DESVIGNES, 1856

Ph. polyzonias (FORSTER, 1771) (= segmentator GRAVENHORST, 1829)

Ph. rufipes rufipes Holmgren, 1860

### Acknowledgements

I am grateful to J. SAWONIEWICZ for providing the material for study. I would like to thank to A. FREITAG (Musée Cantonal de Zoologie, Lausanne, Switzerland) for the loan of type of *Phytodietus alpinator* AUBERT, 1969. H. PIEKARSKA-BONIECKA made valuable comments to the manuscript.

### **REFERENCES**

- AUBERT J.F. 1969. Ichneumonides non pétiolées inédites et révision partielle des genres *Phytodietus* Grav. et *Netelia* Gray. Bulletin de la Société Entomologique de Mulhouse. 1968: 93-103.
- Buszko J., Nowacki J. 2000. The Lepidoptera of Poland. A Distributional Checklist. Polskie Towarzystwo Entomologiczne, Poznań-Toruń, 178 pp.
- GĄDEK K. 1984. Rola pożytecznych entomofagów w ograniczaniu masowych pojawów szkodników jodły (*Abies alba* Mill.) na terenie Gór Świętokrzyskich. III Sympozjum Ochrony Ekosystemów Leśnych. Wydawnictwo SGGW-AR, Warszawa, **2**: 35-45.
- Kostro-Ambroziak A. 2006. Wstępne badania nad Tryphoninae (Hymenoptera: Ichneumonidae) Biebrzańskiego Parku Narodowego i jego otuliny. Wiadomości Entomologiczne **25** Supl. 2: 107-108.
- KOSTRO-AMBROZIAK A., SAWONIEWICZ J. 2007. *Phytodietus (Phytodietus) antennator* KASPARYAN, 1993 (Hymenoptera, Ichneumonidae) a new species to the European Fauna. Polish Journal of Entomology **76**: 57-60.
- KASPARYAN D.R., TOLKANITZ V.I. 1999. Ichneumonidae. Subfamily Tryphoninae: tribes Sphinctini, Phytodietini, Oedemopsini, Tryphonini (Addendum), Idiogrammatini. Subfamilies Eucerotinae, Adelognathinae (Addendum), Townesioninae [In Russian]. Fauna of Russia and neighbouring countries. Insecta Hymenoptera, New Series, No. 143, 3 (3). Nauka, Saint Petersburg, 405 pp.
- KAŹMIERCZAK T. 2004. Gąsienicznikowate Ichneumonidae. In: BOGDANOWICZ W., CHUDZICKA E., PILIPIUK I., SKIBIŃSKA E. (eds). Katalog Fauny Polski - charakterystyka i wykaz gatunków. Muzeum i Instytut Zoologii PAN, Warszawa, 1: 289-293, 318-333.
- PIEKARSKA-BONIECKA H., WILKANIEC B., BOROWIAK-SOBKOWIAK B., TRZCIŃSKI P. 2002. Regulacja liczebności zwójki różóweczki (*Archips rosanus* (L.)) występującej w środowisku sadowniczym okolic Poznania. Postępy w Ochronie Roślin **42** (1): 223-227.
- SAWONIEWICZ J. 1996. Porównanie potencjału regulacyjnego zgrupowań gąsienicznikowatych (Hymenoptera: Ichneumonidae) w koronach jodły (*Abies alba* Mill.). In: Porównanie potencjału regulacyjnego szkodników jodły w różnych rejonach Polski. Fundacja Rozwój SGGW, Warszawa: 48-83.
- ZWAKHALS K. 2005. Fauna Europaea: Ichneumonidae. In: ACHTERBERG I.K. VAN (ed.) (2004) Fauna Europaea: Hymenoptera: Symphyta-Ichneumonoidea. Fauna Europaea version 1.2, http://www.faunaeur.org

Received: April 24, 2007 Accepted: May 25, 2007